



ULTRAFLEX SA HDPE

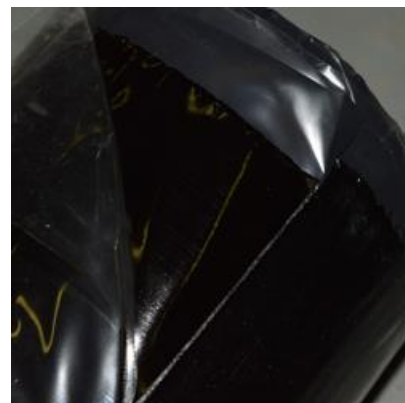
Self-adhesive bitumen membrane for basements and below ground structures

Description:

Self-adhesive SBS-modified bitumen membrane ULTRAFLEX SA HDPE is designed for waterproofing of foundations, basements and below ground structures. Thanks to the special adhesive bitumen binder, the material can be used on surfaces, where the standard torch-on application is forbidden. As a top layer it has a cross laminated HDPE film, which will provide better mechanical and puncture resistance (static and dynamic), high elongation and high dimensional stability characteristics.

Application:

ULTRAFLEX SA HDPE membranes are applied by the removal of the siliconized film onto previously prepared surface, clear of any debris or sharp projections. The joints should be a minimum of 100 mm and pressure rolled to ensure a good adhesion. Primers shall be used on to porous or dusty surfaces to prepare base for achieving most effective waterproofing longevity.



Advantages:

- Excellent mechanical properties in all directions (stability, tear strength and tensile strength) due to the cross laminated PE film (HDPE) finish.
- Excellent puncture and impact resistance.
- High quality bitumen-polymer compound has the property of “self-healing”, which gives absolute tightness in places of mechanical penetration.
- Outstanding elongation properties prevent the material from damage caused by movements of the substrate.

Benefits:

- Easy to repair in case of accidental damage.
- No need for any additional equipment and skills.
- High speed of application.

Declared performance:

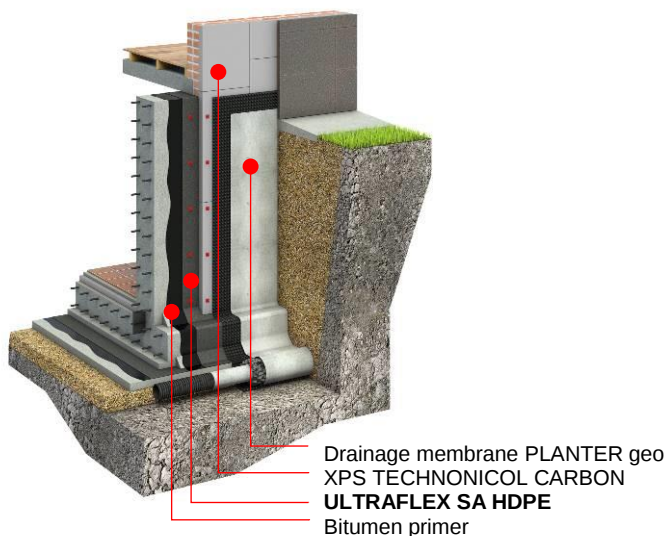
Essential characteristics	Test method	Performance	Essential characteristics	Test method	Performance
Protection of the top side	-	cross laminated HDPE film	Tensile strength, N/5cm	UNE-EN 12311-1	220 ± 80
Protection of the bottom side	-	anti-adhesion film	Tensile strength, kPa	ASTM D412	2300 ± 200
Length x Width, m	-	20 x 1	Elongation at break, %	ASTM D412	≥ 300
Thickness, mm	-	1.5	Puncture resistance, N	ASTM E154	275 ± 50
Flexibility at low temperature, °C	UNE-EN 1109	≤ -15	Resistance to impact, mm	UNE-EN 12691	≥ 900
Peel strength, N/m	ASTM D903	1600 ± 200	Tear resistance, N	ASTM D1004	23 ± 5
Bond strength to concrete, N/mm ²	UNE-EN 13596	≥ 0.5	Resistance to static loading (B Method), kg	UNE-EN 12730	≥ 20
Joint strength: shear resistance	UNE-EN 12317-1	220 ± 80	Watertightness (60 kPa)	UNE-EN 1928	pass
Microbiological resistance (30 weeks)	UNE-EN 14225	pass	Resistance to oxidation (85 °C – 90 days)	UNE-EN 14575	pass
Dimensional stability, %	UNE-EN 1107-1	< 0.5	Humidity resistance factor	UNE-EN 1931	115.000

General requirements:

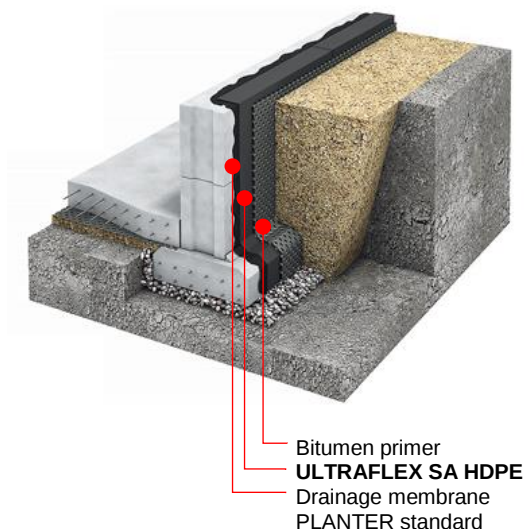
- Rolls of the material should be stored in a dry place, protected from direct sun light.
- Rolls should be stored upright on pallets in a 1-row height.
- Falls or other mechanical impacts should be avoided during transportation and storage.
- The application surface must be cleaned of dust, debris, grease, leaves, oil and should not have gaps and cracks or other irregularities to ensure proper adhesion of the membrane.

System solutions:

■ FOUNDATION WITH THERMAL INSULATION



■ FOUNDATION WITHOUT THERMAL INSULATION

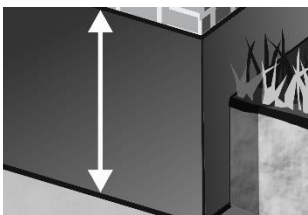


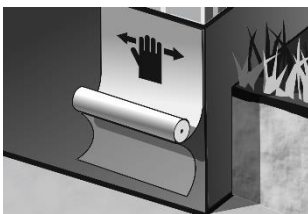
Directions for use:

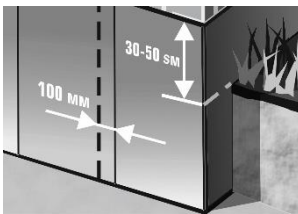
Self-adhesive bitumen membranes in cold periods tend to harden resulting in decreased adhesion. Installation of self-adhesive materials should be performed within the favorable climatic conditions i.e. dry weather and temperatures above +10°C. At temperatures below +10°C and high air humidity the adhesion of the membrane could be compromised and therefore it is necessary to use the hot air to restore characteristics of the material.

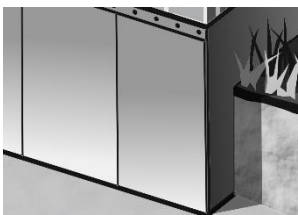
Installation:

- 

Clean the surface and treat it with bitumen primer.
- 

Measure the depth of the foundation and cut the material to the required length.
- 

Apply the material from top downward by gradual removing the protective film, unrolling the membrane and smoothing it to the surface.
- 

The material to be installed to the height of 30-50 cm above the ground level. Longitudinal overlaps should be 100 mm, sheet end overlaps - 150 mm.
- 

The top end of the waterproofing membrane to be fixed at basement level by profiled metal edge strip and sealed.
- Protect the membrane from mechanical damage by means of XPS TECHNONICOL CARBON ECO / PROF 300 or PLANTER STANDARD / GEO profiled drainage membrane.